

## I. AMENDMENTS

### Listing of Claims:

The following listing of claims replaces all previous listings or versions thereof:

- 1.-44. (canceled)
45. (currently amended) An isolated ~~sentrin-specific-protease (SENp)~~ polypeptide comprising the amino acid sequence  $\text{PIH}^{\text{L}}/\text{R}\text{XVHW}$  wherein X is a glycine, lysine or glutamic acid.
46. (previously presented) The isolated polypeptide of claim 45, comprising at least 25 contiguous amino acid residues of SEQ ID NO: 2, SEQ ID NO: 8, or SEQ ID NO: 10.
47. (previously presented) The isolated polypeptide of claim 45, comprising at least 50 contiguous amino acid residues of SEQ ID NO: 2, SEQ ID NO: 8, or SEQ ID NO: 10.
48. (previously presented) The isolated polypeptide of claim 45, comprising at least 100 contiguous amino acid residues of SEQ ID NO: 2, SEQ ID NO: 8, or SEQ ID NO: 10.
49. (previously presented) The isolated polypeptide of claim 45, comprising at least 150 contiguous amino acid residues of SEQ ID NO: 2, SEQ ID NO: 8, or SEQ ID NO: 10.
50. (previously presented) The isolated polypeptide of claim 45, comprising at least 200 contiguous amino acid residues of SEQ ID NO: 2, SEQ ID NO: 8, or SEQ ID NO: 10.
51. (previously presented) The isolated polypeptide of claim 48, further comprising amino acid residues 400 to 509 of SEQ ID NO: 8.
52. (canceled)
53. (previously presented) The isolated polypeptide of claim 48, further comprising amino acid residues 461 to 568 of SEQ ID NO: 10.
54. (previously presented) The isolated polypeptide of claim 45, comprising SEQ ID NO: 2, SEQ ID NO: 8, or SEQ ID NO: 10.
55. (currently amended) An isolated polypeptide comprising at least 25 contiguous amino acids of SEQ ID NO: 2 ~~a sentrin-specific-protease SENp1~~.
56. (cancelled)
57. (previously presented) The isolated polypeptide of claim 55, comprising at least 50 contiguous amino acids of SEQ ID NO: 2.

58. (previously presented) The isolated polypeptide of claim 55, comprising at least 100 contiguous amino acids of SEQ ID NO: 2.
59. (previously presented) The isolated polypeptide of claim 55, comprising at least 150 contiguous amino acids of SEQ ID NO: 2.
60. (previously presented) The isolated polypeptide of claim 55, comprising at least 200 contiguous amino acids of SEQ ID NO: 2.
61. (canceled)
62. (canceled)
63. (currently amended) The isolated polypeptide of claim 55, wherein the SENP1 polypeptide comprises SEQ ID NO: 2.
64. (currently amended) A method of purifying ~~the a-sentrin-specific-protease-SENP1~~ polypeptide of claim 55 from a sample comprising collecting a sentrin-specific protease polypeptide sample; incubating the sample with an antibody that specifically binds the SENP1 polypeptide; and obtaining the SENP1 polypeptide.
65. (previously presented) The method of claim 64, wherein the purified SENP1 polypeptide comprises the amino acid sequence of SEQ ID NO: 2.